

**COURSES IN SURVEY RESEARCH**  
**UNIVERSITY OF MINNESOTA**  
**1994-1995**

**MINNESOTA CENTER FOR SURVEY RESEARCH**

**UNIVERSITY OF MINNESOTA**

**AUGUST 1994**

**COURSES IN SURVEY RESEARCH**  
**UNIVERSITY OF MINNESOTA**  
**1994-1995**

**MINNESOTA CENTER FOR SURVEY RESEARCH**  
**UNIVERSITY OF MINNESOTA**  
**AUGUST 1994**

# CONTENTS

This directory was compiled and printed by:

The Minnesota Center for Survey Research  
University of Minnesota  
2331 University Ave. S.E., Suite 141  
Minneapolis, Minnesota 55414

Telephone: 612/627-4282

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

	Page
<b>INTRODUCTION</b>	1
<b>COURSES LISTED BY FIELD OF INSTRUCTION</b>	
Agricultural and Applied Economics	3
Agriculture, Forestry, and Home Economics	3
Educational Psychology	4
Family Social Science	4
Food Science and Nutrition	5
Forest Resources	5
Geography	7
Humphrey Institute of Public Affairs	7
Industrial Relations	8
Journalism and Mass Communication	9
Management Advancement Program	10
Marketing	11
Natural Resources and Environmental Studies	11
Political Science	12
Psychology	12
Public Health	13
Rhetoric	13
Social Work	14
Sociology	15
Speech-Communication	17
Statistics	18
Vocational and Technical Education	19

## INTRODUCTION

There are many courses at the University of Minnesota that address topics relevant to survey research. The following list includes only those courses in which at least 25 percent of the primary focus is on survey research. This information on courses has been assembled by the Minnesota Center for Survey Research (MCSR) at the University of Minnesota. For further information on the classes, call the departmental contact, the instructors, or MCSR.

Readers are urged to confirm the scheduling of course offerings.

### NOTES:

- # Indicates that the consent of instructor is required to register for the course.
- () Percent of time spent on survey research will be shown at the end of the course description in parentheses.

## **COURSES LISTED BY FIELD OF INSTRUCTION**

### **AGRICULTURAL AND APPLIED ECONOMICS**

College of Agriculture

Departmental contact: Ben Senauer, Professor, 625-5724.

#### **AgEc 5550 Food Marketing Economics**

Joint Day/Extension

Prereq. AgEc 3101 or equiv

Winter '95

Economics of food marketing in United States. Covers food consumption trends; consumer food behavior; food expenditure and consumption data; consumer survey methodology; the food distribution and retailing system; food policy issues related to food marketing. Students pursue individual and group projects. Meets concurrently with FSCN 5474. Senauer, Asp. (20%)

### **AGRICULTURE, FORESTRY, AND HOME ECONOMICS**

Office of Special Programs

Departmental contact: Richard Krueger, Professor and Extension Specialist, 624-2221.

#### **AgEd 5247 Evaluating Extension Education: varies**

Day School

Summer Session '95

This course is offered at the Minnesota Extension Summer School held annually in Duluth. Under this general course number different topics may be covered each year. In one year the topic may be exclusively telephone and mail survey methods, another year may cover focus groups, etc. Meets concurrently with HEEd 5247. Krueger. (Up to 100%)

## EDUCATIONAL PSYCHOLOGY

College of Education

Departmental contact: William Bart, Professor, 624-0585.

### **EPsy 5243    Practicum: Survey and Observational Research Methods**

Day School

Prereq. EPsy 5220, EPsy 5221 or equiv

Winter '95

Planning, development, implementation, analysis, and reporting of survey and observational methods: questionnaires, interviews, and various observational techniques. To be announced. (60%)

## FAMILY SOCIAL SCIENCE

College of Human Ecology

Departmental contact: Katharine Witherow, Assoc. Administrator, 625-8771.

### **FSoS 5205    Introduction to Family Research Methods**

Day School

Prereq. FSoS 3260 and FSoS 5200

Winter '95

Logic and philosophy of scientific method. Family research questions and objectives, standards for evaluating family research, techniques of data gathering (qualitative and quantitative methods), analysis, reporting and writing. Rosenblatt.

## FOOD SCIENCE AND NUTRITION

College of Human Ecology

### **FSCN 5474    Food Marketing Economics**

Cross listed with AgEc 5550. See Agricultural and Applied Economics for course information.

## FOREST RESOURCES

College of Natural Resources

Departmental contact: Alan R. Ek, Professor and Department Head, 624-3400.

### **FR 5130    Geographic Information Systems in Natural Resource Analysis**

FR 5131    Lab for FR 5130

Joint Day/Extension

Prereq. senior, grad, or #

Spring '95

Introduction to the application of geographic information systems (GIS) to natural resource and regional planning studies. Theory and technical points, emphasis on applications. Hands-on experience with microcomputer. Case study, including map digitizing, data processing, and generation of map products. Queen. (25%)

### **FR 5200    Aerial Photo Interpretation**

Day School

Winter '95

Types, characteristics, procurement, preparation, viewing, and interpretation of color, black and white, and color infrared aerial photographs; basic aerial photography; introduction to mapping; applications to resource surveys. Bauer. (25%)



**FR 5202 Remote Sensing: Field Applications**

Day School, offered at Cloquet Forestry Center

Prereq. FR 5212, FR 5200

Fall '94

Field applications of remote sensing for inventory, mapping and monitoring forest and natural resources. Bauer. (80%)

**FR 5212 Natural Resources Inventory**

Day School

Prereq. AgET 3030 or equiv computer programming course with FORTRAN or BASIC language, Math 1142 or Math 1211, Stat 3081 or Stat 5021

Spring '95

Measurement of stand variables, forest products, forest growth and yield. Elementary statistics. Sampling methods for estimating characteristics of natural resources and resource use for management decision making. Lecture and laboratory. Burk. (80%)

**FR 5222 Forest Resources Inventory**

Day School, offered at Cloquet Forestry Center

Prereq. FR 5212

Fall '94

Field applications of sampling and measurement methods for estimating natural resource characteristics for inventory, appraisal and monitoring purposes. Ek. (80%)

**FR 5262 Remote Sensing of Natural Resources**

Day School

Winter '95

Introduction to remote sensing for natural resource inventories, land use analyses, and environmental monitoring activities; photographic, thermal, multispectral, and radar sensing procedures; airborne and satellite systems; visual and computer-assisted analysis techniques; oriented toward an interdisciplinary audience. Bauer. (25%)

**FR 5412 Advanced Remote Sensing**

Day School

Prereq. FR 5220

Spring '95

Working knowledge of quantitative remote sensing. Both theoretical basis and practical aspects, including energy-matter interactions, radiation measurements and sensors, and digital image analysis. Bauer. (30%)

See also NRES 5210 and NRES 5220.

**GEOGRAPHY**

College of Liberal Arts

Departmental contact: Helga Leitner, Associate Professor, 625-9010.

**Geog 5701 Field Research**

Day School

Spring '95

Research design of empirical studies. Survey and case study research. Methods of data collection: design and reliability of various forms of questionnaires, observational methods, content analysis. Data analysis: data screening, simple statistical analysis, and representation. This course includes a field component. Leitner, Weil. (30-50%)

**HUMPHREY INSTITUTE OF PUBLIC AFFAIRS**

Departmental contact: Karen Schuster, Administrative Secretary, 625-3497.

**PA 5310 Policy and Evaluation Research**

Day School

Prereq. #

Spring '95

Varieties of quantitative and qualitative methods for use in policy analysis, formulation, and evaluation; alternative frameworks for understanding policy. Measurement, experimental design, survey research, evaluation research, fieldwork. Eustis. (25%)

**INDUSTRIAL RELATIONS**

Carlson School of Management

Departmental contact: Dr. Brian McCall, 624-2500.

**IR 8001 Introduction to Quantitative Methods and Techniques for Industrial Relations**

Day School and Joint Day/Extension

Offered: Fall '94, day and evening

Winter '95, evening

Spring '95, day and evening

Industrial relations problems identified. Application of descriptive and inferential statistics including probability, hypothesis testing, confidence intervals, analysis of variance, and bivariate linear regression and correlation. Introduction to computer software, hardware, for problem solutions and exercises. Ahlburg, Budd, Keane, McCall, Noe. (25%)

**IR 8011 Intermediate Quantitative Methods and Techniques for Industrial Relations**

Day School and Joint Day/Extension

Prereq. Stat 5021 or IR 8001

Offered: Fall '94 day and evening

Winter '95, day and evening

Spring '95, evening

Theory and applications of alternative quantitative methods and techniques in the formulation and analysis of various industrial relations problems and practices. Cases, problem sets, and computer exercises. Ahlburg, Budd, Keane, McCall, Noe. (25%)

**JOURNALISM AND MASS COMMUNICATION**

College of Liberal Arts

Departmental contact: Dan Wackman, Director, 111 Murphy Hall, 625-0020.

**Jour 5501 Communication and Public Opinion I**

Day School

Prereq. 16 credits in social science

Winter '95

Theories of the communication process and of persuasion and attitude change. Functions of interpersonal and mediated communication. Doyle. (30%)

**Jour 8501 Seminar: The Process of Quantitative Mass Communication Research**

Day School

Prereq. 12 credits in social science, statistics or concurrent reg.

Fall '94

Survey of quantitative research methods. Emphasis on the relationship between theory and research, concept explication, measurement, instrumentation, and design issues. Methods introduced include social survey, and experimentation. Wackman. (25%)

**Jour 8502 Seminar: Mass Communication Research**

Day School

Prereq. Jour 8501, statistics or concurrent reg.

Winter '95

Application of social research methods to theoretical issues and problems in mass communication studies. Emphasis on advanced issues in theory testing, problem definition, sampling and design considerations. Students do project designs and gather data. Doyle. (33%)



## MANAGEMENT ADVANCEMENT PROGRAM

Continuing Education and Extension

Departmental contact: Brett Mizelle, 305 Wesbrook Hall, 626-8713.

### MAP 0755 Designing Questionnaires and Surveys

*No Credit*

Earl Brown Center

Offered Fall '94, Spring '95

This course helps you construct reliable and valid questionnaires and surveys. Topics include the strengths and weaknesses of surveys, components of a good questionnaire, and differences between needs assessments and evaluation summaries. How to write effective questions, prepare an efficient format, set up response alternatives, conduct the study, and prepare responses for computer analysis. Matross. (100%)

## MARKETING

Carlson School of Management

Departmental contact: Donald V. Harper, Professor and Chair, 624-5833.

### Mktg 3010 Buyer Behavior and Marketing Analysis

Joint Day/Extension

Prereq. DSci 1050 and Mktg 3000 or equiv, and at least 90 credits completed or in progress

Offered every quarter

Identifying and applying secondary and primary data to solve marketing problems. Special consideration is given to consumer and organizational buyer behavior. Topics include survey and experimental research techniques, market segmentation, data analysis, behavior concepts and processes, consumer and organizational decision-making models, and managerial applications of these methods. Childers, John, Ross. (30%)

### Mktg 8051 Marketing Research

Day School and Extension

Prereq. basic statistics and grad.

Offered every quarter (day or evening)

Graduate level of survey research methods. Childers, Loken, John, Schneider. (30%)

## NATURAL RESOURCES AND ENVIRONMENTAL STUDIES

College of Agriculture and Natural Resources

Departmental contact: John V. Bell, Assistant Dean of Natural Resources, 624-6768.

### NRES 5210 Survey, Measurement, and Modelling Methods for Natural Resources, I.

Joint Day/Extension

Prereq. Math 1142, Stat 3011, computer literacy  
Winter '95

Introduction to survey design, measurement concepts, and modelling methods useful in the study of natural resources and environmental issues. Emphasis on data collection and analysis. Ek. (70%)

### NRES 5220 Survey, Measurement and Modelling Methods for Natural Resources, II.

Joint Day/Extension

Prereq. Stat 5021 and NRES 5210  
Winter '95

Advanced survey design, measurement concepts and modelling methods for study of natural resources and environmental problems. Burk, Ek. (50%)

## POLITICAL SCIENCE

College of Liberal Arts

Departmental contact: John Sullivan, Professor, 624-4305.

### **Pol 5769 Political Polling**

Day School

Prereq. Pol 3766, or Pol 3796, or Pol 5737, or  
Pol 5738, or Pol 5767, or Jour 3796

(Not offered '94-'95)

The use of polling in political campaigns; assessing candidate images; sample selection; questionnaire construction; impact of question wording; interviewing techniques; telephone polling; analysis of poll data. Sullivan. (95%)

## PSYCHOLOGY

College of Liberal Arts

Departmental contact: Eugene Borgida, Professor, 625-3381.

### **Psy 5202 Attitudes and Social Behavior**

Day and Extension

Prereq. Psy 3201 or #

Spring '95

Survey of attitude theory, measurement, and persuasion research in social psychology. Focus on the structure, function, and formation of attitudes; relationship between attitudes and various social behaviors; basic principles of persuasion. Borgida. (25%)

## PUBLIC HEALTH

School of Public Health

Departmental contact: Janet Shapiro, 624-9432.

### **PubH 5625 Use of Computers in Public Health Research**

Day School

Spring '95

This course will provide training in the use of a computer to facilitate the data analysis portion of needs assessments, and quantitative and evaluation research projects in Public Health. Both survey design and the use of surveys are included in the course. Leland. (30%)

### **PubH 5870 Survey Research and Sample Design in Health Services Research**

Day School

Spring '95

The objective of the course is to introduce students to survey and sample design issues relevant to the health services field. By the end of the course, the student will be able to design a health survey and design a sample for a health services research project. Moscovice. (100%)

## RHETORIC

College of Agriculture

Departmental contact: Earl E. McDowell, Professor, 624-3657.

### **Rhet 5500 Research in Communication Strategies**

Joint Day/Extension

Spring '95

Designed to acquaint students with the fundamental terminology of survey and experimental research. The major focus is on cross-sectional and longitudinal survey designs. McDowell. (80%)

## SOCIAL WORK

College of Human Ecology

Departmental contact: Nancy Johnston, Director of Graduate Studies,  
624-1893.

**SW 8991 Seminar on Research**  
Day School  
Prereq. Doctoral student  
Fall '94

First in a series of advanced research methods in social research. The course focuses on fundamental concepts and skills central to the research process, including concepts which are particularly important to survey research. Beeman. (40%)

**SW 8992 Seminar on Research**  
Day School  
Prereq. Doctoral student  
Winter '95

Second in a series of advanced research methods in social research. The course focuses on fundamental concepts and skills central to the research process, including concepts which are particularly important to survey research. Gilgun. (40%)

## SOCIOLOGY

College of Liberal Arts

Departmental contact: Katherine Simon Frank, Coordinator of  
Undergraduate Advising, 624-7326 or 624-4300 or Don McTavish,  
Professor, 624-4300.

**Soc 3801, 3802, 3803 Sociological Methods I, II, III**

Day School and Extension

Prereq. basic algebra or Math 0009 (and prior parts of the sequence); **must be a sociology major.**

The three-quarter sequence is offered twice a year, starting in Fall and Winter quarters. Extension sequence offered once, starting Fall '94.

The sequence deals with the statistical analysis of data (including computer use, typically of survey data, and research design). During the sequence students conduct surveys and analyze existing survey data, deal with design topics relevant to social surveys and other related methods. (Survey research focus varies with the part of the sequence and instructor.) Anderson, Bian, Leik, McLeod, McTavish. (50% on average)

**Soc 5801 Computer Methods in Social Research**

Day School

Fall '94

Basic concepts of information processing for social science research; elementary computer programming; practice in the use of computers for data analysis in social science; selected problems of computer usage in sociology. Anderson. (25%)

**Soc 5812 Content Analysis**

Day School

Prereq. Soc 3803 or equiv or #

Winter '95

Content analysis methods used in social sciences research, emphasizing computer-based developments. Theory, concept, and dictionary formation, interview and data preparation procedures, contextual and conceptual computer analysis, interpretation, integration into quantitative and qualitative research. McTavish. (25%)

**Soc 8812 Data Analysis I**

Day School

Prereq. Soc 8811

Fall '94, Spring '95

Multivariate techniques based on general linear model: multiple correlation and regression, analysis of variance, covariance, canonical correlation, discriminant analysis, exploratory and confirmatory factor analysis, logistic regression and structural equation modeling. Application using computers. Knoke. (33%)

**Soc 8813 Data Analysis II**

Day School

Prereq. Soc 8812 or #

Fall '95

Methods of categorical data analysis, including log linear analysis and other discrete variable techniques. Event history. Time-series, longitudinal data, and network analysis. Application using computers. McTavish. (75%)

**Soc 8814 Seminar: Design of Sociological Research I**

Day School

Prereq. 1st year sociology grad student or permission from instructor

Fall '94

Multiple objectives of social research and how they inform research design. Bian.

**Soc 8815 Seminar: Design of Sociological Research II**

Day School

Prereq. Soc 8814 or permission from instructor.

Winter '94

Measurement and quantitative and qualitative data collection and management. Review of approaches. McLeod.

**Soc 8816 Seminar: Design of Qualitative Research**

Day School

Prereq. #

(Not offered '94-'95)

Introduction to the techniques of qualitative research. Discussion of methodological issues, presentation and discussion of ongoing field projects. Cooperman. (25%)

**Soc 8817, 8818 Fieldwork and Laboratory Training in Social Research**

Day School

(Not offered '94-'95)

Direct experience in the conduct of research in field and laboratory settings. It involves a variety of research techniques. Pierce. (75%)

**Soc 8831, 8832, 8833 Measurement**

8831: Offered Fall '94

8832, 8833: Day school

(Offered periodically, see catalog)

Nature of measurement and its role in theory and research, measurement models and scaling techniques including various survey-style scaling approaches; special problems in measurement analysis. Anderson. (25%)

**SPEECH-COMMUNICATION**

College of Liberal Arts

Departmental contacts: David Rarick, Associate Professor, 624-9349; Donald Browne, 624-5800; or Scott Poole, Associate Professor, 624-2808.

**Spch 3501 Introduction to Communication Research Methods**

Extension

Prereq. Spch 3401 or #

Fall '94, Winter '95, Spring '95

An introduction to quantitative research methods in speech-communication, including design of communication experiments, surveys, interaction coding, content analysis, observational research, and relevant statistical methods. (25% on survey methods)

**Spch 8501 Seminar in Survey Research in Speech Communication**

Day School

Prereq. Jour 8001 or #

(Not offered '94-'95)

Basic methods of survey research (sampling, questionnaire design, interviews). Each student conducts a small scale survey relevant to own interests in the field of communication. Staff. (100%)

**STATISTICS**

College of Liberal Arts

Departmental contact: Frank Martin, Associate Professor, 625-4214.

**Stat 5201 Sampling Methodology in Finite Populations**

Day School

Prereq. Stat 3091 or Stat 5021 or Stat 5121, or #

Spring '95

Simple random, systematic, stratified, and unequal probability sampling. Ratio and regression estimation. Multistage and cluster sampling. Hawkins. (100%)

**Stat 5211 Theory of Sample Surveys**

Day School

Prereq. Stat 5122 or Stat 5133

(Offered when feasible)

Mathematical treatment of survey sampling, including stratified and multistage sampling, models for nonsampling errors. (100%)

**Stat 8221 Topics in Sampling**

Day School

Prereq. Stat 5132

Spring '95

Basic and advanced sampling including the role of the likelihood principle in sampling theory and Bayesian approaches to sampling. Meeden. (100%)

**Stat 8931 Advanced Topics in Statistics**

Sampling theory offered once a year by arrangement and schedule of interest.

Prereq. Stat 5131, Stat 5132, Stat 5133 and Stat 5201 or equiv.

Typically limited to graduate standing in statistics.

Fall '94, Spring '95

**VOCATIONAL AND TECHNICAL EDUCATION**

College of Education

Departmental contact: Mary Gupta, Exec. Secretary, 624-7485.

**AdEd 8100 Research in Adult Education**

Day School

Prereq. #

Spring '95

Review and analysis of current research and research procedures in adult education. Williams. (25%)

**AgEd 5247 Evaluating Extension Education**

**HEEd 5247** See Agriculture, Forestry, and Home Economics for course information.

Summer '95

**VoEd 5200 Evaluation of Local Vocational Education Programs**

Extension

Winter '95

Procedures and experience in use of instruments for conducting program evaluations for teachers, administrators, and state department personnel. Krueger. (35%)